

Claim 1. (currently amended) A method of treating lupus erythematosus in a mammal with that disease comprising administering to the mammal a physiologically effective amount of an inhibitor of PDE2 wherein said inhibitor ~~does not substantially inhibit COX I or COX II~~ has an IC_{50} for COX I or COX II no less than twice the inhibitor's IC_{50} for PDE2.

Claim 2. (original) The method of claim 1 wherein mammal is also administered an inhibitor of PDE5.

Claim 3. (original) The method of claim 2 wherein said inhibitor of PDE2 and PDE5 comprise the same compound.

Claim 4. (original) The method of claim 1 wherein said inhibitor is administered without an NSAID.

Claim 5. (original) The method of claim 2 wherein said inhibitor IC_{50} for PDE2 of no more than about 25 μM and has an IC_{50} for each of the COX enzymes greater than about 40 μM .

Claim 6. (original) A method of treating lupus erythematosus in a mammal comprising administering to the mammal a compound of the formula:

wherein R_1 is independently selected in each instance from the group consisting of hydrogen, halogen, lower alkyl, loweralkoxy, amino, loweralkylamino, di-loweralkylamino, loweralkylmercapto, loweralkyl sulfonyl, cyano, carboxamide, carboxylic acid, mercapto, sulfonic acid, xanthate and hydroxy;

R_2 is selected from the group consisting of hydrogen and lower alkyl;

R_3 is selected from the group consisting of hydrogen, halogen, amino, hydroxy, lower alkyl amino, and di-loweralkylamino;

R_4 is hydrogen, or R_3 and R_4 together are oxygen;

R_5 and R_6 are independently selected from the group consisting of hydrogen, lower alkyl, hydroxy-substituted lower alkyl, amino lower alkyl, lower alkylamino-lower alkyl, lower alkyl amino di-lower alkyl, lower alkyl nitrile, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$, and a C_2 to C_6 amino acid;

R_7 is independently selected in each instance from the group consisting of hydrogen, amino lower alkyl, lower alkoxy, lower alkyl, hydroxy, amino, lower alkyl amino, di-lower alkyl amino, amino lower alkyl, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_2\text{H}$, $-\text{SO}_2\text{NH}_2$, and $-\text{SO}_2(\text{lower alkyl})$;

m and n are integers from 0 to 3 independently selected from one another;

Y is selected from the group consisting of quinolinyl, isoquinolinyl, pyridinyl, pyrimidinyl, pyrazinyl, imidazolyl, indolyl, benzimidazolyl, triazinyl, tetrazolyl, thiophenyl, furanyl, thiazolyl, pyrazolyl, or pyrrolyl, or substituted variants thereof wherein the substituents are one or two selected from the group consisting of halogen, lower alkyl, lower alkoxy, amino, lower alkylamino, di-lower alkylamino, hydroxy, $-\text{SO}_2(\text{lower alkyl})$ and $-\text{SO}_2\text{NH}_2$; and

pharmaceutically acceptable salts thereof.

Claim 7. (currently amended) The method of claim 6 wherein Y is selected from pyridinyl or ~~quinolinyl~~ quinolinyl.

Claim 8. (original) The method of claim 6 wherein R_1 is selected from the group consisting of halogen, lower alkoxy, amino, hydroxy, lower alkylamino and di-loweralkylamino.

Claim 9. (original) The method of claim 8 wherein R_1 is selected from the group consisting of halogen, lower alkoxy, amino and hydroxy.

Claim 10. (original) The method of claim 6 wherein R_2 is lower alkyl.

Claim 11. (original) The method of claim 9 wherein R_2 is lower alkyl.

Claim 12. (original) The method of claim 6 wherein R_3 is selected from the group consisting of hydrogen, halogen, hydroxy, amino, lower alkylamino and di-loweralkylamino.

Claim 13. (original) The method of claim 9 wherein R_3 is selected from the group consisting of hydrogen, halogen, hydroxy, amino, lower alkylamino and di-loweralkylamino.

Claim 14. (original) The method of claim 13 wherein R_3 is selected from the group consisting of hydrogen, hydroxy and lower alkylamino.

Claim 15. (original) The method of claim 13 wherein R_3 is selected from the group consisting of hydrogen, hydroxy and lower alkylamino.

Claim 16. (original) The method of claim 6 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower alkyl, amino lower alkyl, lower alkylamino-lower alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 17. (original) The method of claim 15 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower alkyl, amino lower alkyl, lower alkylamino-lower alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 18. (original) The method of claim 6 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 19. (original) The method of claim 17 wherein R_5 and R_6 are independently selected from the group consisting of hydrogen, hydroxy-substituted lower alkyl, lower alkyl amino di-lower alkyl, $-\text{CO}_2\text{H}$, $-\text{C}(\text{O})\text{NH}_2$.

Claim 20. (original) The method of claim 6 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, lower alkyl amino, di-lower alkyl amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 21. (original) The method if claim 19 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, lower alkyl amino, di-lower alkyl amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 22. (original) The method of claim 6 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 23. (original) The method of claim 18 wherein R_7 is independently selected in each instance from the group consisting of hydrogen, lower alkoxy, hydroxy, amino, halogen, $-\text{CO}_2\text{H}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{NH}_2$, amino lower alkyl, and $-\text{SO}_2(\text{lower alkyl})$.

Claim 24. (original) The method of claim 22 wherein at least one of the R_7 substituents is ortho- or para-located.

Claim 25. (original) The method of claim 23 wherein at least one of the R₇ substituents is ortho- or para-located.

Claim 26. (original) The method of claim 24 wherein at least one of the R₇ substituents is ortho-located.

Claim 27. (original) The method of claim 25 wherein at least one of the R₇ substituents is ortho-located.

Claim 28. (original) The method of claim 6 wherein Y is selected from the group consisting of quinolinyl, isoquinolinyl, pyridinyl, pyrimidinyl and pyrazinyl or said substituted variants thereof.

Claim 29. (original) The method of claim 6 wherein said compound comprises (Z)-5-fluoro-2-methyl-(4-pyridylidene)-3-(N-benzyl)indenylacetamide hydrochloride.

Claim 30. (canceled) The method of claim 6 wherein said compound comprises (Z)-5-fluoro-2-methyl-(4-pyridylidene)-3-(N-benzyl)-indenylacetamide p-methylbenzenesulfonate.

Claim 31. (canceled) A method of inhibiting activated macrophages in a mammal with lupus erythematosus comprising chronically administering to the mammal a physiologically effective amount of an inhibitor of PDE2.

Claim 32. (canceled) The method of claim 31 wherein mammal is also administered an inhibitor of PDE5.

Claim 33. (canceled) The method of claim 32 wherein said inhibitor of PDE2 and PDE5 comprise the same compound.

Claim 34. (canceled) The method of claim 31 wherein said inhibitor does not substantially inhibit COX I or COX II.

Claim 35. (canceled) The method of claim 33 wherein said inhibitor does not substantially inhibit COX I or COX II.

Claim 36. (canceled) The method of claim 31 wherein the mammal is a companion pet.

Claim 37. (canceled) The method of claim 36 wherein the mammal is human.

Claim 38. (currently amended) A method of treating lupus erythematosus in a mammal with that disease comprising inhibiting PDE2 in the diseased tissue ~~without substantially inhibiting COX I or COX II~~ with a compound having an IC_{50} for COX I or COX II no less than twice the compound's IC_{50} for PDE2.

Claim 39 (canceled) A method of inhibiting activated macrophages in a mammal with rheumatoid arthritis comprising chronically administering to the mammal a physiologically effective amount of an inhibitor of PDE2 having a PDE2 IC_{50} no more than about 25 μM and having a COX IC_{50} greater than about 40 μM .